PHP88
IS THERE A ROOM FOR NON-ECONOMIC CRITERIA IN THE DECISION MAKING PROCESS IN THE HEALTH CARE SECTOR IN POLAND?
Kolasa K
Department of Pharmacoeconomics, Medical University of Warsaw, Warsaw, Poland
OBJECTIVES: To investigate the attitudes towards non-economic criteria to be used in resource allocation decisions in the health care sector among the Polish nurses. **METHODS:** A cross-sectional survey with pen and paper interview was designed. A responder was asked person trade-off question such as how many Y's would be equivalent to 10 X's. Characteristics of a hypothetical patient defined as X and Y varied in each of three decision making scenarios. Answers from a median responder were used for the estimation of disease severity and potential for health weights as well as aversion to inequalities in health. VAS scale was adopted. Cohen's kappa coefficient and Fisher exact test were performed. **RESULTS:** 100 nurses with on average of 15 years of professional experience were interviewed. In the first scenario, the utility gain was equal for both X and Y. The median responder chose 10 and more Y to compensate for 10 X with a worse starting point. Half of participants valued health gain differently dependent on the baseline utility. In the second scenario, the median responder chose 10 Y to compensate for 10 X irrespective of X's superior utility gain. Although X had a higher potential to benefit, only 32% of participants valued it more than Y. In the third scenario, the median responder required a greater number of subjects in program B to compensate for the lost of equality in the end health for both X and Y in program A. More than 65% of participants valued health equality (program A) against greater health gain (program B). **CONCLUSIONS:** Among study participants, an aversion to inequalities in end health was the most common. Different weightings of health gain dependent on the disease severity were accepted by half of participants. Majority of responders did not consider potential to benefit in their allocation decision.

PHP89
A QUALITATIVE ANALYSIS OF NICE TECHNOLOGY APPRAISALS: IDENTIFYING TRENDS AND COMMONALITIES IN RESTRICTED AND NON-RECOMMENDED PHARMACEUTICALS
Cho YP, Dalsania RR
GfK Market Access, New York, NY, USA
OBJECTIVES: The number of technologies appraised by NICE has been increasing since 2007, with a steep increase between 2009 and 2010. Much of this can be attributed to the influx of specialty pharmaceuticals, particularly targeted oncology therapies. Along with this increase in the number of appraisals, the rate of 'restricted recommendations' and 'non-recommendations' has also escalated. Various meanings and interpretations of 'restricted' can be applied depending on the area in which the restriction is applied (e.g. patient sub-groups, line of therapy). This research sets out to identify recurring trends and commonalities behind products that have received a 'restricted recommendation' or 'non-recommendation' as well as standardize the term 'restricted' based on the impact of the appraisal on market access. **METHODS:** NICE appraisals between January, 2001 and December, 2013 was reviewed and analyzed through simple descriptive statistics. The content of the appraisals were closely reviewed to identify the criteria and key elements driving each decision. Results of this analysis were applied in standardizing the term 'restricted' in order to identify the implications of these restrictions on market access. **RESULTS:** NICE appraised 176 technologies from January 2001 - December 2013 (withdrawn appraisals and re-appraisal were not included in the analysis). Between the time periods of 2000-2007 and 2008-2013, the average number or appraisals a year nearly doubled. The rate of 'restricted recommendation' increased from 12% to 36% in the same time period and the number of 'non-recommendations' increased from 10% to 23%. **CONCLUSIONS:** Given the high cost and targeted regimen of specialty pharmaceuticals, (e.g. biologic oncology therapies), ability to demonstrate cost-effectiveness in broad patient populations has become increasingly challenging, leading to higher rates of 'restricted recommendations.' Commonalities among technologies receiving 'non-recommendations' include use of unacceptable comparators, endpoints, and study durations.

PHP90
CONCEPUTALIZING A MODEL TO ASSESS THE IMPACT OF INTERNATIONAL REFERENCE PRICING REFORMS
Robbins S[1], Staginnus U[2], Dosanjh J[1], Gitlin M[3]
[1]*InnoPeritus, Geneva, Switzerland,* [2]*Endocyte, Zug, Switzerland,* [3]*InnoPeritus, Venice, CA, USA*
OBJECTIVES: The objective of this study was to develop a conceptual framework to estimate potential consequences of IRP reforms by estimating the impact if a European country was to include Turkey into the set of countries that it uses to establish the reference price. **METHODS:** Phase 1 consisted of obtaining evidence on the IRP countries using a literature review from 2011 to 2013 (WHO/HAI Systematic Review - May 2011) based on ECONLIT, MEDLINE and grey literature. Phase 2 consisted of developing a conceptual framework and model database to summarize IRP designs, reference baskets, methods and updates. Model inputs for the product included prices, volume, and launch phase. Phase 3 consisted of building and testing the model from a manufacturer perspective with a variable time horizon up to 5 years. Products from the epidermal growth factor receptor (EGFR) class were selected to estimate the potential effects of including Turkey into the reference basket used by EU countries to calculate reference rules. **RESULTS:** Four peer-reviewed and a number of websites and white papers were identified discussing IRP related issues. A conceptual framework was designed considering 1) database of IRP country rules, 2) product data, and 3) model input interface to conduct one-way sensitivity analysis of a simulated IRP reform. Inclusion of Turkey into the reference basket of various EU markets lead to large negative financial impacts for companies with EGFR products. The countries that lead to the largest impact were Romania and Greece. The second order effects such as countries that re-referenced Greece and Romania were larger over the 5-year time frame compared with the primary effects. **CONCLUSIONS:** The proposed conceptual framework may offer another tool to estimate the impact of IRP reforms as we found that even small changes to reference baskets used in IRP can lead to large negative financial impacts for pharmaceutical manufactures.

PHP91
ASSESSING THE QUALITY OF HEALTH ECONOMIC EVALUATIONS ATTACHED TO PRICE APPLICATIONS FOR NEW PHARMACEUTICALS PROPOSED FOR INCLUSION IN THE FINNISH REIMBURSEMENT SYSTEM
Maljanen T, Koskinen H, Tuominen U
The Social Insurance Institution, Helsinki, Finland
OBJECTIVES: In most western countries it is a prerequisite before a new drug is approved into the reimbursement system that its cost-effectiveness has been demonstrated. The pricing authorities' assessment of the cost-effectiveness is usually based on a health economic evaluation required from the applicant. In Finland these evaluations have been obligatory since 1998. The objective of this study is to assess the present quality of these economic evaluations. **METHODS:** This study is based on a random sample of 13 economic evaluations submitted with price applications in Finland in 2012. These evaluations were assessed using a structured questionnaire with 25 different items. The items assessed include e.g. the choice of comparator, the method of analysis, the structure of the model, the estimation costs and health effects and the assessment of uncertainty. **RESULTS:** Only two of the 13 evaluations were reliable enough for their results to be used as such in the pricing and reimbursement decision. In seven evaluations the results were of some use in the decision making. Among the reasons limiting their usefulness were that they contained uncertain assumptions, that some costs items were excluded from the analysis, and that the effectiveness of the treatments was based mainly on assumptions. Four economic evaluations could not be used in the decision making at all because the comparator was wrong, the effectiveness estimates were biased, or there was a lot of uncertainty attached to the key parameters (effectiveness, quality of life and costs). **CONCLUSIONS:** There is still much to be improved in the quality of the submitted economic evaluations. This need for improvements is highlighted by the fact that the era of prolonged austerity has made it all the more important that only drugs with an acceptable cost-effectiveness ratio are accepted into the reimbursement system.

PHP92
DISSECTING THE DELAYS: THE IMPACT OF NEW POLICIES AND PRACTICES ON TOTAL TIME TO REIMBURSEMENT IN ONTARIO
Mills F, Siu E, Poinas AC, Wyatt G
Wyatt Health Management, Oakville, ON, Canada
OBJECTIVES: To assess the effects of policy and institutional changes on the total Time to Reimbursement (tTTR) of innovative pharmaceutical products in Canada. Such changes include: the removal of criteria for "pre-NOC" drugs; queuing at CDR as its capacity to process submissions is stretched; and the emergence of the pan-Canadian Pricing Alliance (pCPA), which negotiates with manufacturers on behalf of drug plans. **METHODS:** Using our proprietary CDR Tracker® database we assessed the tTTR, i.e. time from receipt of Notice of Compliance (NOC) to provincial reimbursement, for all CDR-reviewed drugs reimbursed by the Ontario Public Drug Plan. We separately examined the responsibilities of pharma manufacturers, CDR and the provinces themselves. We analyzed the Time to Submission, (TTS), i.e. NOC date to CDR submission date, Time to Recommendation (TTRec), i.e. CDR submission date to CDR recommendation date, and the Time to Decision (TTD) by the drug plan, i.e. recommendation date to Ontario formulary decision date. We assessed the tTTR for each year of CDR's existence to identify changes of importance to manufacturers. **RESULTS:** Removal of criteria for pre-NOC submissions increased their number: 17 pre-NOC submissions have occurred in months since the policy change, compared to 4 in total previously. Average TTS fell from 217 days to 151 days for drugs submitted before and after the change. TTRec prior to the queuing period was 203 ± 40 days. Since queuing was introduced this has increased to 214 ± 18 days. TTD has steadily declined over time and sharply since the arrival of pCPA. tTTR rose steadily from the beginning of CDR and fell sharply with the introduction of pCPA. **CONCLUSIONS:** pCPA and CDR's efforts have attentuated the consequences of queuing so far, though the full effect of the large and growing number of drugs currently in queue at CDR remains to be seen.

PHP93
BENEFIT DESIGN CHANGE IN A COMMERCIALLY INSURED CONTINUOUSLY ENROLLED POPULATION
Su W[1], Carlson A[1], Hedin C[2]
[1]*University of Minnesota, minneapolis, MN, USA,* [2]*Prime Therapeutics, minneapolis, MN, USA*
OBJECTIVES: Numerous studies have examined prescription utilization and medication adherence using continuous enrollment criteria with claims data. Benefit design changes may have an impact on both measures. The purpose of this analysis was to indentify the multiple changes of benefit plan designs that occurred in a commercially insured population continuously enrolled for 30 months. **METHODS:** Retrospective study examining eligibility data and health plan benefit design records. Commercially insured beneficiaries aged 18 or older and enrolled from January 1st, 2011 through June 30th, 2013 were included. The benefit designs for all beneficiaries were identified from administrative records. **RESULTS:** 2,489,106 beneficiaries met enrollment criteria. Approximately 12% (289,159 beneficiaries) experienced at least one change in retail, mail, or Extended Supply Network (ESN) benefit design at some point during their enrollment. 248,734 beneficiaries (86.0%) experienced changes in retail benefit design; 261,526 beneficiaries (90.4%) experienced changes in mail benefit design; 97,548 beneficiaries (33.7%) experienced changes in ESN benefit design. Among the retail changes, 44,134 beneficiaries (17.7%) had a change in tier structure [23,490 with an increased in number of tiers; 20,644 with a decreased in number of tiers]. Additionally, 10,627 beneficiaries (4.3%) with a retail tier copayment converted to a coinsurance design; 5,301 beneficiaries (2.1%) with retail coinsurance converted to a tier copayment design; 173,760 beneficiaries (69.9%) stayed in tier copayment design but had a change in retail